BEFORE

THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

	Docket No		
In re:	Application of Chem-Nuclear Systems, LLC, an EnergySolutions company, for Adjustment in the Levels of Allowable Costs and for Identification of Allowable Costs))))	APPLICATION (for Fiscal Year 2017-2018)

Pursuant to the provisions of S.C. Code Ann. § 48-46-40(B)(4) (Rev. 2008 & Supp. 2016), Chem-Nuclear Systems, LLC, an Energy Solutions company, ("Chem-Nuclear" or the "Company") submits this Application for adjustment in the levels of certain "allowable costs" and for the identification of certain "allowable costs" for the operation of its regional low-level radioactive waste disposal facility located in the vicinity of Barnwell, South Carolina. In support of the relief, which it requests in this Application, Chem-Nuclear would respectfully show unto this honorable Commission:

- 1. On June 6, 2000, the Governor of the State of South Carolina signed the Atlantic Interstate Low-Level Radioactive Waste Compact Implementation Act (the "Act"). The Act is codified as S.C. Code Ann. §§ 48-46-10, *et seq.* (2008 & Supp. 2016), as amended.
- 2. Section 48-46-40(B)(1)(Supp. 2016) of the Act authorizes and directs the Commission "to identify allowable costs for operating a regional low-level radioactive waste disposal facility in South Carolina." Section 48-46-30(1) (Supp. 2016) defines "allowable costs" as "costs to a disposal site operator of operating a regional disposal facility." Under that definition, such costs "are limited to costs determined by standard accounting practices and regulatory findings to be associated with facility operations."

- 3. Section 48-46-40(B)(3)(Supp. 2016) of the Act provides that "allowable costs" expressly include the costs of certain specifically identified activities necessary in the operation of a low-level radioactive waste disposal facility. That Section also provides that "allowable costs" include "any other costs directly associated with disposal operations determined by [the Commission] to be allowable."
- 4. Chem-Nuclear operates a regional low-level radioactive waste disposal facility in Barnwell County, South Carolina (the "Facility"). Consequently, the Commission has the authority to identify the "allowable costs" for the Company's operation of the Facility.
- 5. The Facility is located on a tract of land consisting of approximately 235 acres which the State of South Carolina owns and which the Company leases from the South Carolina Department of Administration. The 235-acre site includes areas for various operations, including completed disposal trenches, potential trench areas, ancillary facilities, water management areas and buffer zone areas.
- 6. The Company conducts its operations at the Facility under South Carolina Radioactive Material License 097 ("License 097") by which the South Carolina Department of Health and Environmental Control ("DHEC") has authorized receipt, storage and disposal of low-level radioactive waste at the Facility. License 097 contains numerous technical conditions and specifications for management of waste at the Facility. In addition to the requirements of License 097, the Facility is subject to DHEC's regulations in 24A S.C. Code Reg. 61-63 (Rev. 2008). DHEC's regulations are compatible with the provisions of "Licensing Requirements for Land Disposal of Radioactive Wastes," which the United States Nuclear Regulatory Commission ("NRC") originally promulgated in 10 C.F.R. Part 61, and DHEC has adopted most of those provisions and enforces them through its own regulations under an agreement with the NRC.

- 7. On June 13, 2017, the Commission issued its Order No. 2017-378 in Docket No. 2016-13-A. In that Order, the Commission identified certain categories of "allowable costs" and identified levels of "allowable costs" within those categories. Order No. 2017-378 approved certain rates for variable allowable costs and identified the sum of \$3,491,610 for total fixed allowable costs for the 12 months ending June 30, 2017. The Order also approved irregular costs of \$407,320 as allowable costs.
- 8. S.C. Code Ann. § 48-46-40(B)(4)(Supp. 2016) provides that an operator of a low-level radioactive waste disposal site may apply for adjustments in the levels of "allowable costs" that the Commission has identified for the previous fiscal year and for identification of costs that the Commission has not previously identified as "allowable costs." Upon approval of such application, Section 48-46-40(B)(4) requires the Commission to authorize the site operator to adjust its "allowable costs" for the current fiscal year to compensate the site operator for revenues lost during the previous fiscal year.
- 9. For the purposes of this Application and its Exhibits, the Company has used the cost categories that the Commission approved in Order No. 2004-349 in Docket No. 2000-366-A, which were based on the recommendations of the parties to the Collaborative Review of the Company's Operations and Efficiency Plan ("OEP").
- 10. During the Company's recently concluded Fiscal Year 2016-2017 (*i.e.*, the twelve months ending June 30, 2017), the Company's actual "allowable costs" in those categories that the Commission identified in Order No. 2017-378 for fixed costs were \$3,612,661, which were \$121,051 more than the amount of \$3,491,610 identified in Commission Order No. 2017-378. Therefore, the Company proposes an adjustment of \$121,051 for allowable fixed costs in this Application.

- 11. With respect to the allowable costs that Order No. 2017-378 characterized as variable labor and non-labor costs, which are dependent upon volumes of waste buried, the Company incurred actual costs in the category of variable labor and non-labor costs in Fiscal Year 2016-2017 of \$152,918, which is \$37,390 more than the total calculated costs of \$115,528 identified in Order No. 2017-378. The calculated costs are derived by multiplying the variable cost rates identified by the Commission in that Order for categories of waste by the number of units in each category. The Company requests an adjustment for variable labor and non-labor costs of \$37,390 in this Application.
- 12. With respect to vault costs, Order No. 2017-378 established certain variable cost rates for each type of waste disposed at the Facility. By applying those rates to the volumes of each type of waste received in Fiscal Year 2016-2017, the Company calculated a total cost for routine disposal vaults of \$307,166. The actual incurred total cost for routine disposal vaults was \$272,988, which is \$34,178 less than the calculated costs. Therefore, the Company proposes no adjustment in this category of costs.
- 13. With respect to those allowable costs which Order No. 2017-438 characterized as irregular costs, the Company incurred total irregular costs for Fiscal Year 2016-2017 of \$437,634. Total irregular costs incurred in Fiscal Year 2016-2017 are \$30,314 more than the costs identified in Order No. 2017-378 of \$407,320. Therefore, the Company requests an adjustment for irregular costs of \$30,314 in this Application.
- 14. The Company has attached to this Application three (3) exhibits pertaining to the adjustments and identification of the categories of "allowable costs" for its disposal operations.
- 15. **Exhibit A** to this Application describes in detail the Company's proposed adjustments for the recovery of its actually incurred costs for fixed, variable and irregular costs to reflect the differences between the level of "allowable costs" identified in Order No. 2017-378

and the level of the Company's actually incurred costs in Fiscal Year 2016-2017. Exhibit A also provides the rates for variable costs, which were contained in Order No. 2016-2017.

- 16. **Exhibit B** describes the actual irregular costs, which the Company incurred in Fiscal Year 2016-2017, organized by project number.
- 17. **Exhibit** C depicts the total fixed costs, irregular costs and variable cost rates that the Company proposes for identification and approval for Fiscal Year 2017-2018.
- 18. For Fiscal Year 2017-2018, the Company requests identification as "allowable costs" a total of \$3,665,007 as allowable fixed costs, as depicted in Exhibit C. Exhibit C also identifies variable material cost rates and variable waste dependent labor rates for Fiscal Year 2017-2018. Irregular costs for Fiscal Year 2017-2018 anticipated at the time of this Application are \$570,000, as specified in Exhibit C. The irregular costs will be discussed in detail in prefiled testimony. The costs and amounts in Exhibits A and C are consistent with the description of "allowable costs" in Section 48-46-40(B)(3)(Supp. 2016), and they have been determined by standard accounting practices and are consistent with the recommendations of the Collaborative Review of the OEP as the Commission approved in Order No. 2004-349 in Docket No. 2000-366-A.

WHEREFORE, Chem-Nuclear Systems, LLC, an Energy*Solutions* company, respectfully prays unto this honorable Commission:

1. To review the Company's Application and issue its Order under S.C. Code Ann. § 48-46-40(B)(4) (Rev. 2008), recognizing the levels of "allowable costs" as depicted in Exhibit A for Fiscal Year 2016-2017, and identifying the levels of irregular costs in Exhibit B for Fiscal Year 2016-2017, and identifying as "allowable costs" those costs depicted in Exhibit C for Fiscal Year 2017-2018.

2. For such other and further relief as is just and proper.

Respectfully submitted,

s/ J. David Black

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Columbia, South Carolina

EXHIBIT A:

FISCAL YEAR 2016-2017

FIXED COSTS

ADJUSTMENT PROPOSED

Fixed costs, subject to a 29% operating margin, were incurred in fiscal year 2016-2017 in the general categories of labor-related costs, non-labor costs, costs allocated from corporate functions, equipment leases and support, depreciation and insurance. The following table compares the actual costs incurred to the costs identified as allowable in Commission Order No. 2017-378:

	Commission Order No. 2017-378	Actual Costs Incurred in FY 2016-17	Adjustment Proposed
Labor, Fringe and Non-labor	\$2,114,646	\$2,137,985	
Corporate Allocation (G&A)	\$657,705	\$859,290	
Equipment leases and support	\$210,094	\$150,768	
Depreciation	\$127,491	\$113,824	
Insurance	\$369,674	\$349,516	
Subtotal (Fixed Cost subject to 29% margin)	\$3,479,610	\$3,611,383	
Legal Support	\$12,000	\$1,278	
Subtotal (Fixed Cost not subject to 29% margin)	\$12,000	\$1,278	
Total Fixed Costs	\$3,491,610	\$3,612,661	\$121,051

The actual Fixed Costs incurred during fiscal year 2016-2017 were \$3,612,661. This amount is \$121,051 more than the amount identified in Commission Order Number 2017-378; therefore, an adjustment of \$121,051 is proposed in this category of costs.

FISCAL YEAR 2016-2017

VARIABLE COSTS

Variable Labor and Non-Labor Costs

ADJUSTMENT PROPOSED

Commission Order No. 2017-378 identified the following categories of rates for projecting Variable Labor and Non-Labor costs: vault purchase and inspection (per vault), ABC waste disposal (per shipment), slit trench operations (per slit trench offload), customer assistance (per shipment), and trench records (per container).

The following table illustrates the Variable Labor and Non-Labor costs that would be calculated using the Variable Labor and Non-Labor rates identified in Commission Order No. 2017-378 and the FY 2016-2017 actual number of units in each category.

	Units	Variable Cost Rate in Commission Order No. 2017- 378	Calculated Cost
Vault Purchase & Inspection			
(per vault)	42	\$209.82	\$8,812.44
ABC Waste Disposal (per shipment) *total shipments, less slit trench shipments, less			
irregular project shipments	42	\$1,904.32	\$79,981.44
Slit Trench Operations			
(per slit trench offload)	0	\$37,425.65	\$0.00
Customer Assistance			
(per shipment)	42	\$47.96	\$2,014.32
Trench records			
(per container)	62	\$398.71	\$24,720.02
Total Calculated Variable Labor and Non- labor Cost			\$115,528.22

The actual Variable Labor and Non-Labor costs incurred in the disposal of waste in fiscal year 2016-2017 resulted in a Total Variable Labor and Non-Labor Cost of \$152,918. This amount is \$37,390 more than the amount that would have been anticipated based on rates provided in Commission Order 2017-378; therefore, an adjustment in the amount of \$37,390 is proposed in this category of costs.

FISCAL YEAR 2016-2017

VARIABLE COSTS

Vault Costs

NO ADJUSTMENT PROPOSED

The following table illustrates the Vault Costs that would be calculated using the Variable Cost rates identified in Commission Order No. 2017-378 and the actual FY 2016-2017 volumes of waste received in each respective category.

	Volume Received ft ³	Variable Cost Rate in Order No. 2017-378	Calculated Cost
Class A waste	4817.88	\$44.80	\$215,841.02
Class B waste	1133.70	\$52.62	\$59,655.29
Class C waste	601.18	\$52.68	\$31,670.16
Slit Trench waste	0.00	\$196.44	\$0.00
Irregular Components (in vaults as an irregular cost)	N/A	N/A	N/A
Irregular Components (not in vaults)	3764	N/A	N/A
Total Calculated Vault Cost			\$307,166.48
Total Volume (cubic feet)	10,316.76		

The total cost incurred for routine disposal vaults used during fiscal year 2016-2017 was \$272,988. This amount is \$34,178 less than the amount that would have been anticipated based on rates provided in Commission Order 2017-378; therefore, no adjustment is proposed in this category of costs.

FISCAL YEAR 2016-2017

IRREGULAR COSTS

ADJUSTMENT PROPOSED

The following table summarizes the Irregular Costs incurred in fiscal year 2016-2017 organized by projects. Exhibit B provides additional descriptions of each of these irregular projects.

Irregular Cost Item	Order No. 2017-378	Actual FY '16-17 Labor	Actual FY '16-17 Non-Labor	Total Cost FY '16-17
Trenches (design, construct, and backfill)	\$100,000	\$10,195	\$91,994	\$102,189
License Renewal and Appeal costs	\$10,000	\$15	(\$67)	(\$53)
Trench Records Software	\$22,924	\$1,393	\$27,217	\$28,610
Site Eng & Drawing Updates	\$1,000			\$0
Site Maintenance	\$92,396	\$1,579	\$117,973	\$119,552
Site Assessment	\$2,000			\$0
Large Component Disposal	\$179,000	\$43,279	\$138,490	\$181,769
Irregular Severance Pay		\$5,567		\$5,567
Total Irregular Costs	\$407,320	\$62,028	\$375,607	\$437,634

The total Irregular Costs incurred in fiscal year 2016-2017 was \$437,634. This amount is \$30,314 more than the amount identified in Commission Order No. 2017-378; therefore, an adjustment of \$30,314 is proposed in this category of costs.

EXHIBIT B:

FISCAL YEAR 2016-2017

IRREGULAR COSTS

ORGANIZED BY PROJECT

PROJECT NUMBERS	PROJECT NAME AND EXPLANATIONS
	Trench Construction and Backfill Operations
188701.8029 188702.8032	(Labor \$25,420 and Non-Labor \$228,384)
100/02.0032	Trench construction activities in FY 2016-17 including design, construction and backfill in Trenches 99 and 100.
	License Appeal
952188.8002	(Labor \$-53.00)
	Cost related to license appeal.
	Large Component Disposal
	(Labor \$43,279 and Non-Labor \$138,490)
188007.8001 188701.8028	
100/01.0020	Cost related to disposal of large component including design and construction of Trench 91 for large component disposal.
	Trench Records Software
188000.8013	(Labor \$1,393 and Non-labor \$27,217)
100000.0013	Cost provides the maintenance and support for trench records database and reporting software.
	Site Maintenance
188004.8002	(Labor \$1,579 and Non-Labor \$117,973)
188004.8003	Site maintenance costs to include, but not limited to, roof repairs,
	interior modular building, HVAC system repair and sewer system upgrade.
952186.8002	Irreg Severance Pay
732100.0002	(Non-Labor \$5,567)
	Severance pay

EXHIBIT C:

PROPOSED FISCAL YEAR 2017-2018 COSTS

We propose the following amounts be identified as allowable costs for fiscal year 2017-2018:

FIXED COSTS	
Fixed Costs to which 29% operating margin is added	
Labor, Fringe and Non-Labor	\$2,163,735
Corporate Allocations (Management Fees/G&A)	\$880,772
Depreciation	\$114,000
Insurance	\$350,000
Equipment Leases and Support	\$155,000
Fixed Costs to which 29% operating margin is not added	
Legal Support	\$1,500
Total Fixed Costs	\$3,665,007
IRREGULAR COSTS	
Trench Construction	\$210,000
License Appeal	\$10,000
Trench Software	\$5,000
Site Eng & Drawing Updates	\$50,000
Site Maintenance	\$5,000
Security Upgrades	\$20,000
Site Assessments	\$0
Large Component Disposal	\$270,000
Total Irregular Costs	\$570,000
VARIABLE COSTS	
Variable Labor and Non-Labor Rates	
Vault Purchase and Inspection (per vault)	\$173.84
ABC Waste Disposal (per shipment)	\$2,427.56
Slit Trench Operations (per slit trench offload)	\$37,425.65
Customer Assistance (per shipment)	\$107.63
Trench Records (per container)	\$594.60
Variable Material Cost Rates (Vaults)	
Class A Waste (per cubic foot)	\$38.93
Class B Waste (per cubic foot)	\$53.00
Class C Waste (per cubic foot)	\$55.57
Slit Trench Waste (per cubic foot)	\$202.33